FROM ECSEL JU TO KDT JU

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KDT JU

KEY DIGITAL TECHNOLOGIES JOINT UNDERTAKING

ECSEL JU 2014-2021

First generation JUs: ENIAC & ARTEMIS JU 2008-2014

- **full bottom-up**
- 2011-2013**: pilot lines, building critical mass**
- payments of EU funding part **linked to national cost recognition**
- start as first of its kind **tripartite** in the universe of European institutions
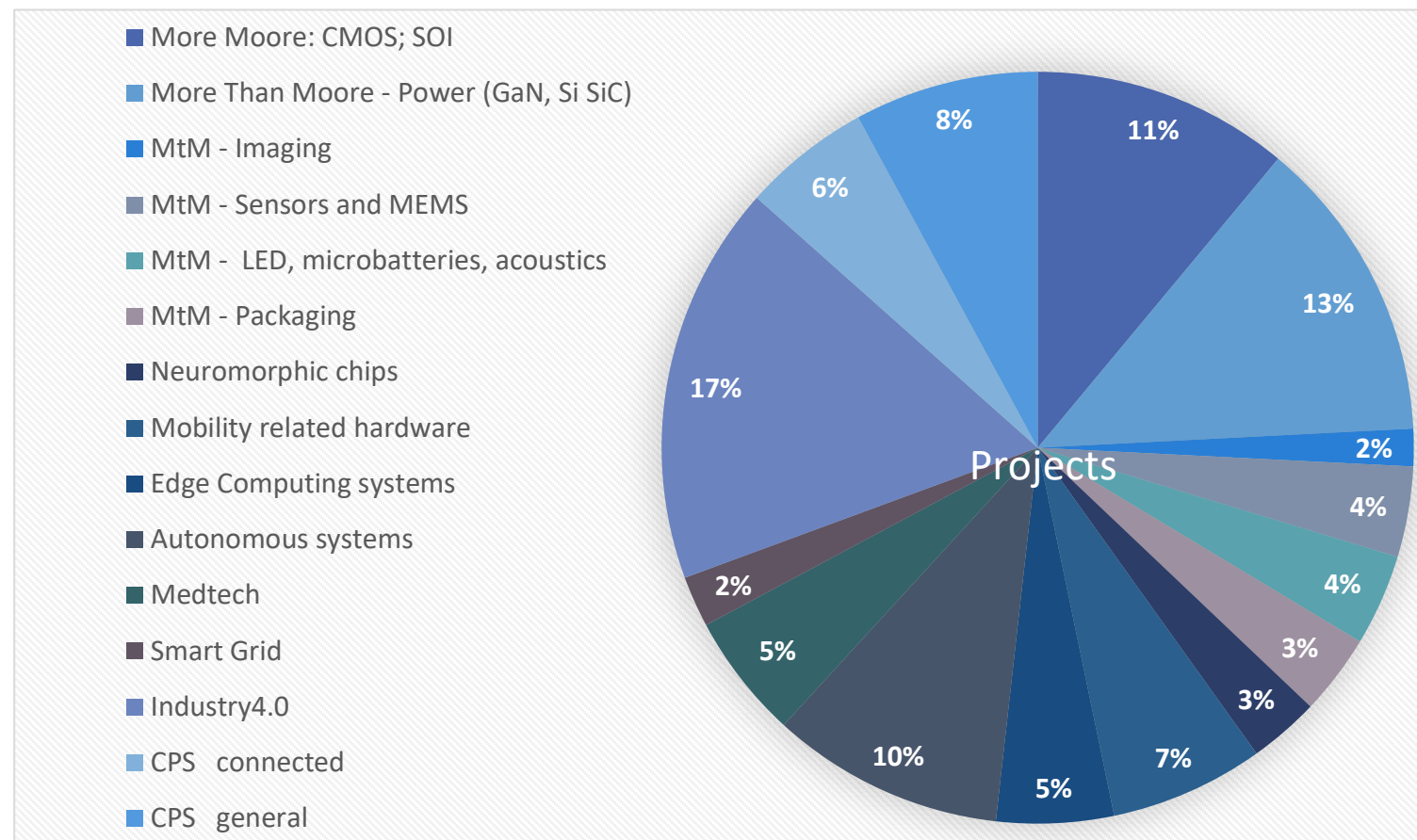
Second generation JU ECSEL JU 2014-2021

- along the **value chain**
- focussed on **industrial leadership** that promote synergies between commercial strategies and societal needs
- full bottom-up **with some special topics** that re-inforce/align national strategies and European priorities
- programme based on the **common agenda of** Europe's ECS
- **lighthouse initiatives**: Mobile.E, Industry4.E, Health.E
- payments of **EU funding based on H2020 rules**, national funding on national cost recognition (with few NA adopting the H2020 rules)
- start as merger of the first two joint undertakings: growing bigger

ECSEL JU 2014-2021

- 96 projects including 4 CSAs

- 3 220 beneficiaries

- 4 690 million Euro cost

- 2 280 million Euros in funding

  (EU+national)

- 408 500 Persons-month

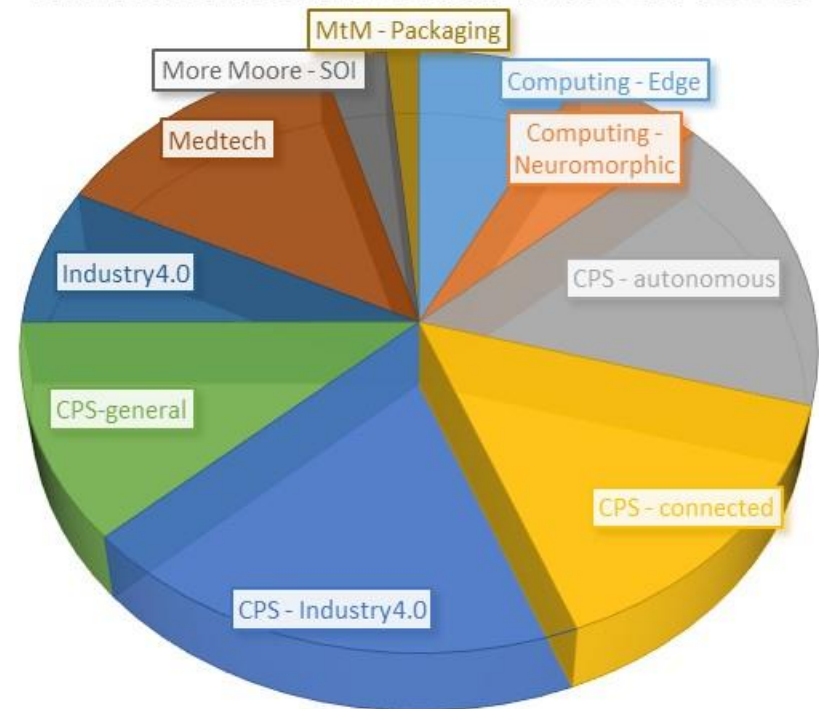- project participants from 29

  participating states

Legend

- More Moore: CMOS; SOI
- More Than Moore - Power (GaN, Si SiC)
- MtM - Imaging
- MtM - Sensors and MEMS
- MtM - LED, microbatteries, acoustics
- MtM - Packaging
- Neuromorphic chips
- Mobility related hardware
- Edge Computing systems
- Autonomous systems
- Medtech
- Smart Grid
- Industry4.0
- CPS connected
- CPS general

Projects pie chart: 11%, 13%, 2%, 4%, 4%, 3%, 3%, 7%, 5%, 10%, 5%, 2%, 17%, 6%, 8%

PORTUGESE PARTICIPATION IN ECSEL JU

- 68 Portugese organisations participated in 24 selected projects (14 large companies, 19 SMEs and 35 Universities and RTOs)

- Total cost of 21.5 M€ from Portugese participants

- Portugese participants will receive 12 M€ from European and national funding
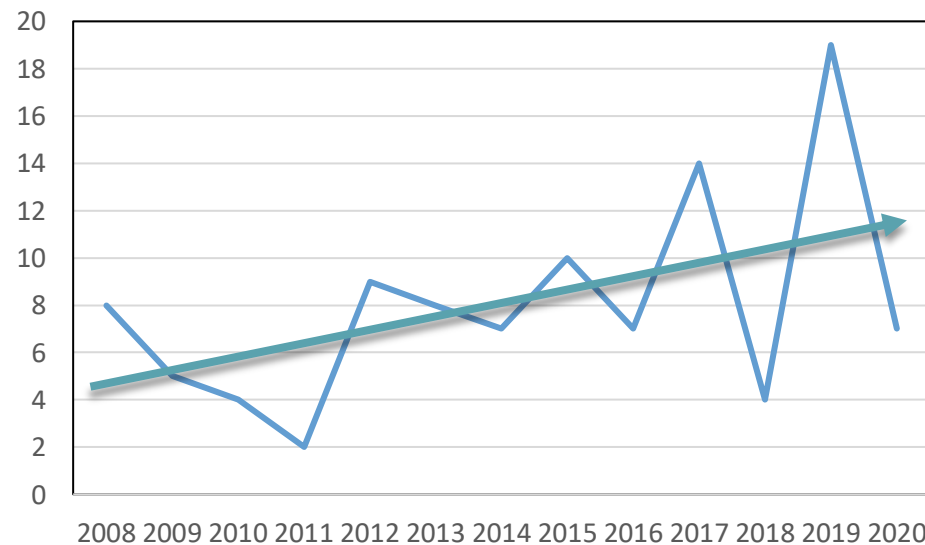
PARTICIPATION IN PROJECTS PER TOPIC

KDT JU

EUROPEAN PARTNERSHIP

WE DID IT!

30 NOVEMBER 2021: KDT ENTRY INTO FORCE

16 DECEMBER 2021: FIRST KDT CALLS 2021

KDT JU 2021-2027

- Third generation JU

- KDT JU = Key Digital Technology Joint Undertaking

- Tripartite: Commission - Participating states – Industry associations

- Associations: AENEAS, INSIDE, EPoSS

- Started : 30 November 2021 (ECSEL JU -> KDT JU)

- Budget ambition : 6B€

  funded by 1,8 B€ (EU)+1,8 B€ (national)

- Based on new framework programme (Horizon Europe)

KDT JU

EUROPEAN PARTNERSHIP
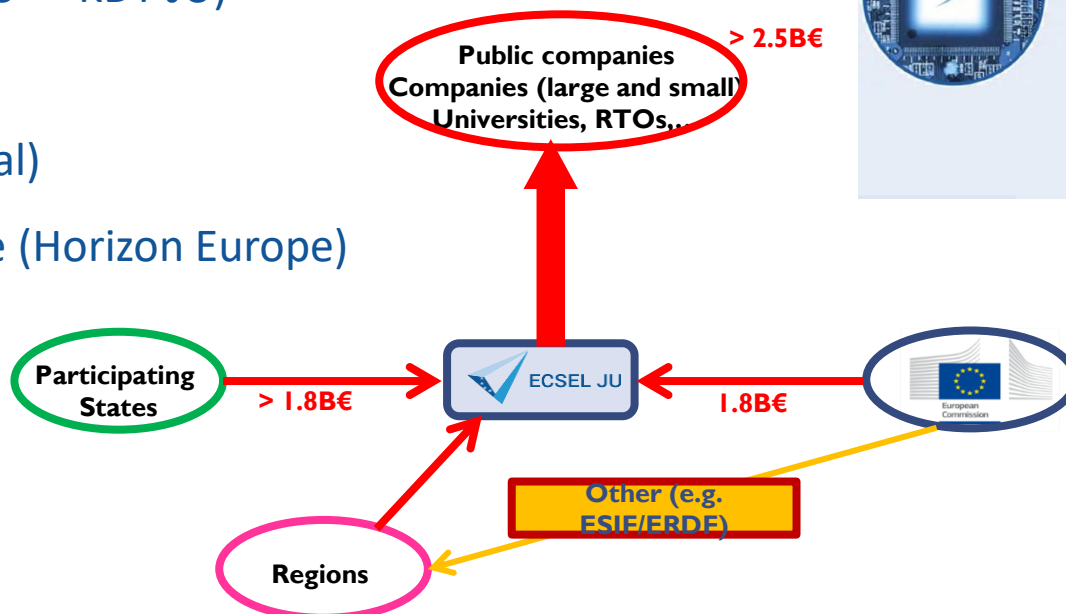
KDT GOVERNANCE

Union Body with Legal Personality

Governing Board
KDT Members
(EC, Participating States, Private Members)

• **Strategic orientation, supervision**
Approves the ECS-SRIA, Work Programme (WP), strategic orientation and all operations of the KDT JU, and supervises the implementation of its activities

Executive Director
Programme Office

• **Chief Executive, legal representation**
Elaborates budget proposal, executes calls; monitors projects

Public Authorities Board
European Commission,
KDT Participating States

• **Representatives of the Public Authorities**
Approves rules of procedure and launch of calls for proposals, establishes funding budget, selection and allocation of funding to successful proposals

Private Members Board
AENEAS, INSIDE, EPoSS

• **Defines research agenda**
Elaborates the Strategic Research and Innovation Agenda (ECS-SRIA) and organise supporting activities and events including an annual Stakeholder Forum.

ECS SRIA

- Boost **industrial competitiveness** through **interdisciplinary** technology innovations.

- Ensure/reinforce **EU strategic autonomy** through secure, safe and reliable ECS supporting key European application domains.

- Establish and strengthen sustainable and resilient ECS value chains supporting the **Green Deal**.

- Unleash the full potential of intelligent and autonomous ECS-based systems for the **European digital era**.

KDT JU

EUROPEAN PARTNERSHIP
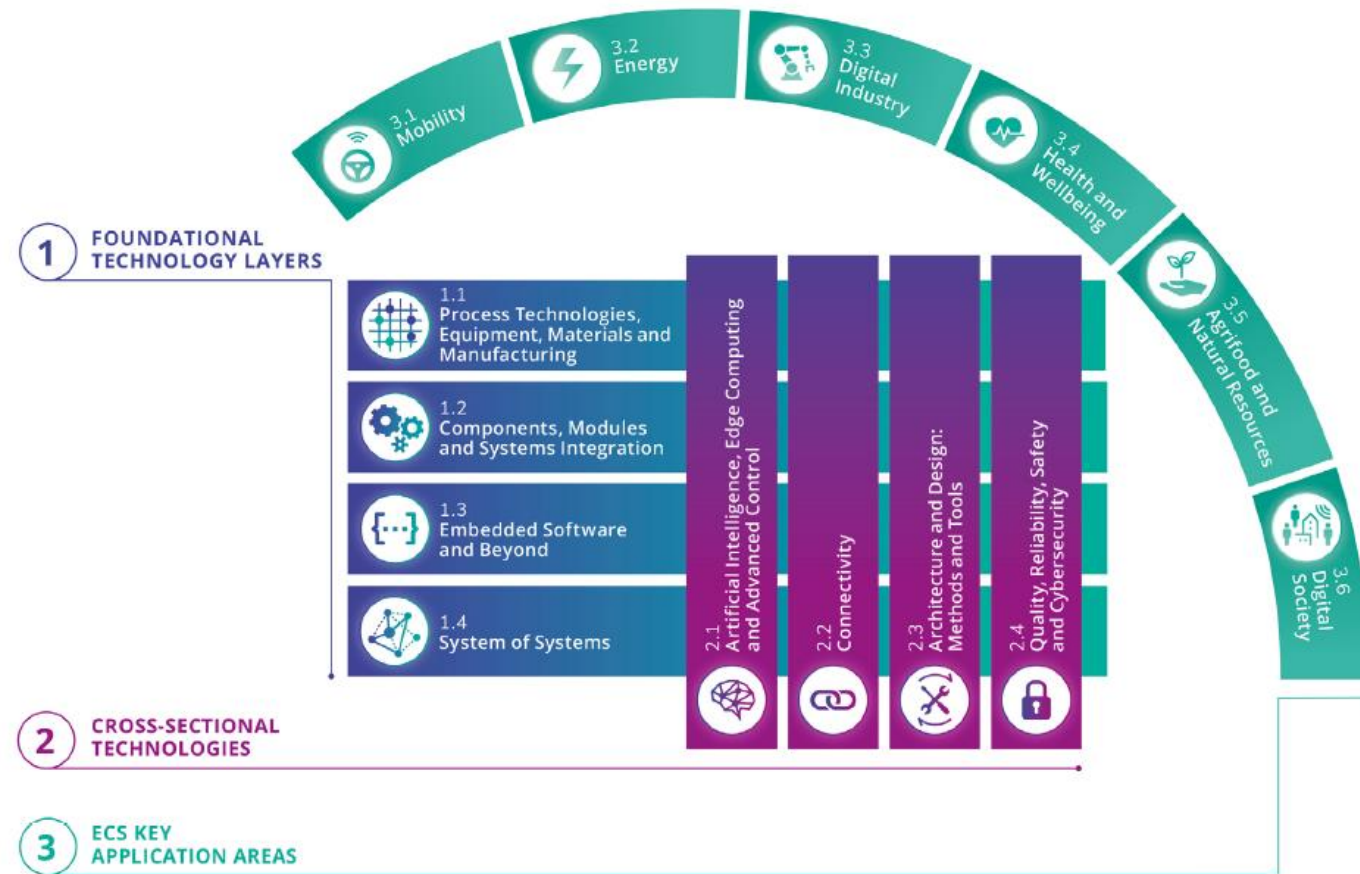
HORIZON EUROPE

Accelerate the twin green and digital transitions and associated transformation of our economy, industry and society.

Special attention will be given to ensuring vibrant cooperation between **universities, scientific communities and industry, small and medium enterprises**.
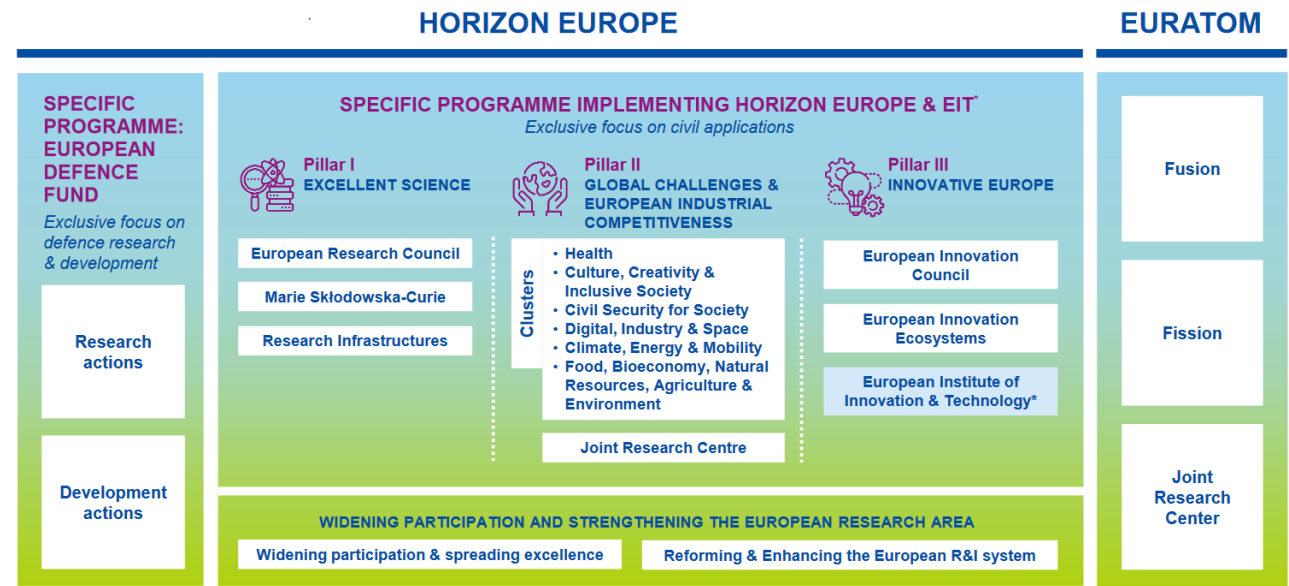
COOPERATION ASPECTS

Potential for synergies through cooperative actions are multiple :

- Smart Networks & Services: initiative on 5G and 6G connectivity
- European High Performance Computing: initiative on underlying supercomputing capacities
- Photonics, AI, data, robotics, Global competitive space system and Made in Europe: synergies are needed where EU industry has to develop leadership and competitiveness in the global digital economy.
- Digital Europe Programmes with testing facilities, skills development and capacity building activities in specific digital domains, similar for Connecting Europe Programmes
- Health, Mobility and Energy partnerships
- IPCEI, other national programmes
- Eureka clusters
- Coordination with regional clusters such as Silicon Europe, Silicon Saxony (Dresden), Minalogic (Grenoble), and DSP Valley (Leuven-Eindhoven)

European Partnerships

KDT JU

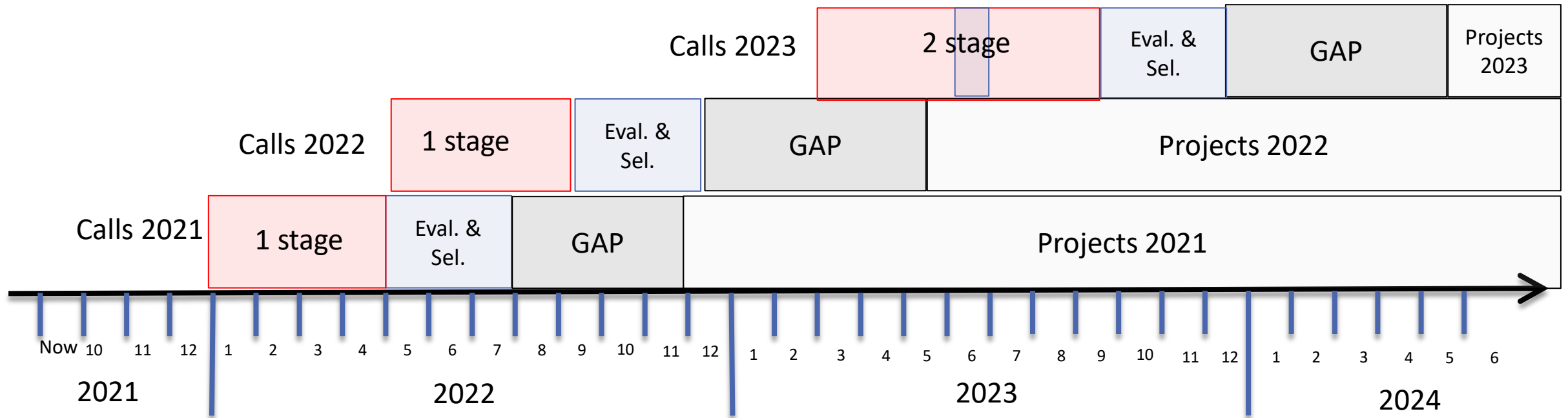EUROPEAN PARTNERSHIP

UPCOMING CALLS

Caveat: no decisions yet for calls 2022 and calls 2023
Call 2022: larger budget than call 2021
Call 2023: 2 stage

KDT JU

EUROPEAN
PARTNERSHIP

A NEW DEVELOPMENT: EUROPEAN CHIPS ACT